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P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

### NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 07/24/2009

GRIFFIN BUTLER WHISENHUNT & SZIPL LLP SUITE PH-I

FILING DATE

2300 NINTH STREET SOUTH ARLINGTON, VA 222042396

APPLICATION NO.

EXAMINER WILSON ODEGODY A

PAPER NUMBER

CONFIRMATION NO.

6594

ARTHNIT 3740 DATE MAILED: 07/24/2009

ATTORNEY DOCKET NO.

FIRST NAMED INVENTOR

10/562.498 12/27/2005 Kazuhiko Katsumata ASAIN0173

TITLE OF INVENTION: GAS COOLING TYPE VACUUM HEAT TREATING FURNACE AND COOLING GAS DIRECTION SWITCHING DEVICE THEREFOR

APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$1510	\$1510	10/26/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown

B. If the status above is to be removed, check box 5b on Part B -Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further c indicated unless correcte maintenance fee notificat	form should be used for correspondence includir d below or directed oth ions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a						
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)			N Fe pa ha	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.					
113 7590 070242009 GRIFFIN BUTLER WHISENHUNT & SZIPL L SUITE PH-1 2300 NINTH STREET SOUTH					Certificate of Mailing or Transmission I hereby certify that this Fee(s) Transmittal is being deposited with the Ut States Postal Service with sufficient postage for first class mail in an enveaddressed to the Mail Stop ISSUE FEE address above, or being facis transmitted to the USPIO (271) 273–2885, on the date indicated below.			ith the United n an envelope ing facsimile below.	
ARLINGTON, V	/A 222042396							(1	Depositor's name)
									(Signature)
				L					(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.		CONFIRMA	TION NO.
10/562,498	12/27/2005			Kazuhiko Katsumata			ASAIN0173	659	94
TITLE OF INVENTIONS THEREFOR									
APPLN, TYPE	SMALL ENTITY	ISS	SUE FEE DUE	PUBLICATION FEE DU	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DAT	E DUE
nonprovisional	NO		\$1510	\$0	\$1510		\$1510	10/2	6/2009
EXAMI	NER		ART UNIT	CLASS-SUBCLASS	7				
WILSON, GF	REGORY A		3749	432-077000	_				
"Fee Address" indi- PTO/SB/47; Rev 03-02 Number is required.  3. ASSIGNEE NAME AN	ordence address (or Cha v/122) attached. cation (or "Fee Address 2 or more recent) attach ND RESIDENCE DATA cass an assignee is ident in 37 CFR 3.11. Comp	nge of G  Indica ed. Use	Correspondence  ation form  of a Customer  E PRINTED ON T	2. For printing on the (1) the names of up or agents OR, alterns (2) the name of a sin registered attorney or 2 registered attorney or 2 registered patent at listed, no name will IPHE PATENT (print or the data will appear on the F a substitute for filing (B) RESIDENCE: (CT.	to 3 registered pater tively, gle firm (having as a r agent) and the nan torneys or agents. If we printed. type) patent. If an assign assignment.	a memb nes of u no nan	er a 2p to be is 3	ocument has	
Please check the appropri	ate assignee category or	catego	ries (will not be pr	inted on the patent):	Individual C	orporati	on or other private gro	oup entity 🔲	Government
4a. The following fee(s) are submitted:    Issue Fee   Publication Fee (No small entity discount permitted)   Advance Order - # of Copies				o. Payment of Fee(s): (Pi A check is enclosed Payment by credit of The Director is here overpayment, to De	ard. Form PTO-203	8 is atta	ched. required fee(s), any de		redit anv
	SMALL ENTITY state	is. See 3	37 CFR 1.27.	b. Applicant is no le					
NOTE: The Issue Fee and interest as shown by the re	l Publication Fee (if requeeords of the United Sta	uired) v tes Pate	vill not be accepted ent and Trademark	Office.	the applicant; a reg	istered	attorney or agent; or th	e assignee or	other party in
Authorized Signature					Date				
Typed or printed name					Registration !				
This collection of informs an application. Confident submitting the completed this form and/or suggestic Box 1450, Alexandria, Vi Alexandria, Virginia 2231	ation is required by 37 C iality is governed by 35 application form to the ons for reducing this but reginia 22313-1450. DC (3-1450.	FR 1.3 U.S.C. USPT rden, sh O NOT	11. The informatic 122 and 37 CFR O. Time will vary hould be sent to the SEND FEES OR O	on is required to obtain on the collection is a depending upon the interest of the collection of the complex of the collection of the complex of the collection of th	r retain a benefit by estimated to take 12 lividual case. Any ci cer, U.S. Patent and TO THIS ADDRES	the pub minuter omment Trader S. SEN	lic which is to file (and to complete, including s on the amount of the lark Office, U.S. Dep D TO: Commissioner	by the USPI g gathering, p ne you requir artment of Co for Patents, P.	O to process) reparing, and e to complete mmerce, P.O. O. Box 1450,

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10/562,498	562,498 12/27/2005 Kazuhiko Katsumata		ASAIN0173	6594	
113 75	90 67/24/2009		EXAM	UNER	
GRIFFIN BUTL	ER WHISENHUNT	WILSON, GREGORY A			
SUITE PH-1			ART UNIT	PAPER NUMBER	
2300 NINTH STREET SOUTH ARLINGTON, VA 222042396			3749 DATE MAII ED: 07/24/200	0	

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 385 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 385 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

# Notice of Allowability

Application No.	Applicant(s)				
10/562,498	KATSUMATA, KAZUHIKO				
Examiner	Art Unit				
Gregory A. Wilson	3749				

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- This communication is responsive to RCE filed 5/18/09.
- The allowed claim(s) is/are 1-3 and 5-8.
- 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) 🛛 All b) ☐ Some\* c) ☐ None of the:
    - 1. A Certified copies of the priority documents have been received.
    - 2. Certified copies of the priority documents have been received in Application No.
    - 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

- A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
- CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) hereto or 2) to Paper No./Mail Date
  - (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. 

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08).
- Paper No./Mail Date 12/18/08 & 5/18/09 ☐ Examiner's Comment Regarding Requirement for Deposit.
- of Biological Material
- 5. Notice of Informal Patent Application
- Interview Summary (PTO-413), Paper No./Mail Date
- 7. 

  Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance

# /Gregory A. Wilson/

Primary Examiner, Art Unit 3749

9. ☐ Other

Application/Control Number: 10/562,498

Art Unit: 3749

#### DETAILED ACTION

## Allowable Subject Matter

Claims 1-3 and 5-8 are allowed.

The following is an examiner's statement of reasons for allowance: The IDS submitted 12/18/08 and 5/18/09 fail to provide art which would anticipate or is obvious over the disclosed invention. Prior art does not a gas cooling type vacuum heat treatment furnace for cooling an article and includes a gas cooling and circulating device for sucking and pressurizing the gas passing through the cooling chamber in combination with a gas direction switching device including a hollow cowling with accommodating suction ports which surrounding the heat exchanger and an elevating device for moving the cowling into position with regards to the heat exchanger.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory A. Wilson whose telephone number is (571)272-4882. The examiner can normally be reached on 7 am - 4:30 pm EST.

Art Unit: 3749

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Gregory A. Wilson/ Primary Examiner, Art Unit 3749 July 16, 2009